



Address:

1822 21st Street
Sacramento, CA 95811

Phone: (916) 739-1200

Fax: (916) 739-1216

Email:

neil@californiacompostcoalition.org

Website:

www.californiacompostcoalition.org

EXECUTIVE COMMITTEE

Bill Camarillo

Agromin

Greg Kelley

Northern Recycling Compost

Mike Madrigal

Recology

Rachel Oster

Recology

Will Bakx

Sonoma Compost

Christy Pestoni Abreu

Upper Valley Recycling

Michael Gross

Z-Best Composting

**LEGISLATIVE
& REGULATORY AFFAIRS**

Neil Edgar, Executive Director

Edgar & Associates, Inc.

Evan Edgar, Engineer

Edgar & Associates, Inc

Justin Malan, Legislative Lobbyist

EcoConsult

MEMBERS

Agromin

Atlas ReFuel

Caglia Environmental

California Wood Recycling

Cold Canyon Compost

CT Bioenergy Consulting LLC

Marin Sanitary Service

Mt. Diablo Recycling

Napa Recycling Compost

Northern Recycling Compost

Organic Waste Solutions

Phoenix Energy

Quackenbush Mt. Compost

Recology

Sonoma Compost

Tracy Delta Compost

Upper Valley Recycling

Zanker Road Resource Management

Z-Best Compost Facility

January 13, 2017

Chief Rajinder Sahota and Assistant Secretary Claire Jahns
California Environmental Protection Agency
California Air Resources Board
1001 I Street Sacramento, CA 95814

**Re: Comments on 2030 Target Scoping Plan Update
Public Workshop on Carbon Sequestration Modeling Methods and Initial
Results for the Natural & Working Lands Sector**

Dear Rajinder Sahota and Claire Jahns

The California Compost Coalition (CCC) is a statewide organization representing operators of permitted facilities involved in the processing and composting of green and food waste materials throughout California. On behalf of these companies, we respectfully submit the following comments on Public Workshop on Carbon Sequestration Modeling Methods and Initial Results for the Natural & Working Lands Sector for the 2030 Target Scoping Plan.

Composting and anaerobic digestion form the cement that binds the Governor's Five Pillars together. Eliminating organics from the landfills will mitigate methane generation as a short-lived climate pollutant to implement SB 1383 (Pillar 4), and instead, create biomethane power at anaerobic digestion facilities to generate more renewable energy to achieve the goals of SB 350 (Pillar 2) and carbon negative fuel for the CNG fleet that collects the organics and implements the Low Carbon Fuel Standard (Pillar 1) to displace diesel. The diverted food waste and digestate can be composted to sequester carbon and be integral to healthy soils (Pillar 5). Organic power and compost use have been deemed the most cost-effective greenhouse gas (GHG) reduction strategy that bonds all Five Pillars together. The California Legislative Analyst's Office determined the cost of composting and anaerobic digestion to be at just \$9/ton of GHG reduction while the overall average is \$57/ton.

CCC shares the vision to set 2030 Targets and develop a sustained funding mechanism to foster the use of compost on our working lands with a focus on irrigated croplands and provide incentives to develop the infrastructure for a low-carbon system in California and improve the sustainability of the California infrastructure. Without 2030 targets coupled with incentives, the regulatory certainty will wane and many projects underway will falter. We need these policy

drivers fortified with incentives to develop this multi-billion dollar low carbon future for the solid waste and recycling industry,

CCC has previously provided detailed verbal and written comments to your staff regarding the CARB/CalRecycle Technical Papers for the 2014 Update, which support the development of a low-carbon system in California today to improve the sustainability of the California infrastructure for tomorrow which includes more compost infrastructure development and compost use to support the Healthy Soils Initiative.

CCC would like to clarify the intent of the Scoping Plan language is that compost use is not just for grasslands, but also for irrigated croplands. Copied below is an excerpt from the Table in the working lands presentation by Alan V. Di Vittorio of Lawrence Berkeley National Laboratory on the CALAND model, where the modeling inputs low and high management scenarios for an incremental 10,000 acres each year, both for croplands (no till/cover crop) and grasslands, would be adopting sustainable agriculture practices, adding a total of 260,000 acres by 2030. However, compost use on irrigated cropland was not specifically mentioned and needs to be identified. We support the use of metrics and goal- setting to get to 2030, and specifically identifying compost use on irrigated cropland can accommodate a new 7 million tons in California. CCC added in the line items below the Table where 40,000 acres per year to 80,000 acres per years should be identified as low and high management scenarios.

5

Management scenarios

• **These scenarios are applied to the baseline, from 2017-2030**

Activity	Low management	High management
Forests - fuel reduction, restoration (state/private)	60,000 ac/yr through 2030	175,000 ac/yr through 2030
Forests – reforestation is implicit in the model	Increase rate 15% above BAU by 2030 (assume 15% above BAU rate in each year to 2030)	Increase rate 30% above BAU by 2030 (assume 15% above BAU rate in each year to 2030)
Croplands – conserve soil C (no-till/cover crop)	10,000 ac/yr through 2030	10,000 ac/yr through 2030
Meadow restoration - rangeland (state/private)	10,000 acres by 2030	30,000 acres by 2030
Grasslands – compost amendment (state/private)	10,000 ac/yr through 2030	10,000 ac/yr through 2030
Delta Fresh Wetlands Restoration (state/private)	15,000 acres by 2030	30,000 acres by 2030
Coastal/Tidal wetlands restoration (state/private)	30,000 acres by 2030	60,000 acres by 2030
Urban – Increase urban tree canopy fraction	20% above current by 2030 (same as baseline)	40% above current by 2030
Ocean – restore eelgrass beds	5% above current levels by 2030	10% above current levels by 2030
Croplands (irrigated) - compost amendment (CCC comments)	40,000 ac/yr through 2030 3.5 million tons per year by 2030.	80,000 ac/yr through 2030 7 million tons per year by 2030

According to CDFA, there are roughly 9 million acres of irrigated farmland, so if just 10,000 acres per year in developed, compost use on only 130,000 acres of working lands would represent only a 1.5% increase. According to UC Rangelands at UC Davis, there are 62.9 million acres of rangeland; pushing for another 130,000 acres would mean only a 0.2% increase. Neither could be classified as aggressive targets and barely qualify as a 'low management scenario', where agriculture could use all of the compost derived from organics recycling mandated by SB 1383 to mitigate methane, given more robust market development targets.

The following is recommended with supportive information:

- **Include Irrigated Cropland (compost use) in the model with a low and high management scenario of 40,000 acres per year and 80,000 acres per year**
- **Grasslands – compost amendment (state/private) – Require CalTrans and Department of General Services and other state agencies to use compost following current state law and increase by over 10,000 acres per year**
- **Have CalRecycle prepared the Fourth Assessment of California Compost and Mulch-Producing Infrastructure for 2017**
- **Link compost use on irrigated croplands to the implementation of the Five Pillars programs by diverting organics from landfills to mitigate methane and producing compost to support the Healthy Soil Initiative and**
- **Starting 2018, have compost use (bulk and organic) be included in the County Crop Report and have CDFA and CalRecycle report compost use**

Include Irrigated Cropland (compost use) in the model with a low and high management scenario of 40,000 acres per year and 80,000 acres per year.

Compost use on irrigated croplands is the biggest opportunity is currently underway at over 1,000,000 acres per year, and is not included the CALANDS model as a huge potential market.

- **Low Management**
 - Assumed - 1,000,000 acres baseline in 2017 (see below on assumptions)
 - 500,000 acres by 2030 to get 50% of new compost produced –
 - Add 40,000 acres each year
 - Possible 1.5 million acres using compost – 17% of all irrigated cropland
- **High Management**
 - Assumed - 1,000,000 acres baseline in 2017 (see below on assumptions)
 - 1,000,000 acres by 2030 to get 100% of new compost produced –
 - Add 80,000 acres each year
 - Possible 2.0 million acres using compost – 22% of all irrigated cropland

Grasslands – compost amendment (state/private) – Require CalTrans and Department of General Services and other agencies to purchase compost following current state law and increase by over 10,000 acres per year.

Current law, as noted in **PRC 42240**, **PRC 42241**, **PRC 42241.5** and **PRC 4224**, requires state agencies to use compost with CalTrans starting in 1991, and Forestry, Parks and Recreation and General Services since 1993. For over 20 years the compost industry has attempted to implement these current laws and had to propose legislation, that failed, to add metrics, incentives, water efficiency linkages, and funding for compost use on these state lands. Compost use on state lands is not being tracked or reported, and is not being used in significant quantities. Compost use on state grass lands at just 10,000 acres per year is a starting point over 20 years in the making.

PRC 42240 requires that the Department of General Services and the board, in consultation with other affected state agencies, shall maintain specifications for the purchase of compost by the State of California. The specifications shall designate the state minimum operating standards and product quality standards. The specifications shall be designed to maximize the use of compost without jeopardizing the safety and health of the citizens of the state or the environment.

PRC 42241 requires that on or after January 1, 1991, the Department of Transportation shall use compost in place of, or to supplement, petroleum-based commercial fertilizers in the state's highway landscape maintenance program.

PRC 42241.5 is where CalRecycle may develop a program to increase the use of compost products in agricultural applications. The program may include, but shall not be limited to, the following:

- (a) Identification of federal, state, and local financial assistance.
- (b) Cooperative efforts with appropriate federal and state agencies.

PRC 42243 requires that on or after January 1, 1993, the Department of Forestry and Fire Protection, the Department of Parks and Recreation, and the Department of General Services shall initiate programs to restore public lands that use compost, co-compost, rice straw, and chemically fixed sewage sludge and shall use those products or materials wherever possible.

CalRecycle 2010 Report – Third Assessment of California Compost and Mulch-Producing Infrastructure

There is a need for a CalRecycle Fourth Assessment Report soon for 2017, as it has been nine years since the last report.

- According to the CalRecycle 2020 Report
 - 5.76 million tons of compost produced in 2008
 - 56% agricultural sales
 - 3.2 million tons applied to agricultural
- Using 7 tons per acres average use – 460,000 acres using compost in 2008
- Croplands – irrigated – compost amendment use – not listed in AB 32 Working Lands CALAND model
- 9 million acres of irrigated farmland in use
- 460,000 acres using compost as a 2008 baseline – use as baseline for AB 32 Scoping Plan (2008)

- Assume 1,000,000 million acres using compost as a 2017 baseline for now based on 9 years of growth since 2008, and anecdotal market surveys since then
- Adjust baseline to 2017 with new CalRecycle Fourth Assessment study and CDFA organic input registry information

SB 1383 – Methane Mitigation – diversion of organic waste from landfill to compost use

- Another 7 million tons per year of compost may be produced and be available in the market between 2025 and 2030 as the Short-Lived Climate Pollutant Plan (SB 1383, Lara) get implemented to reduced all organics by 75% from the landfill disposal by 2025.
- By 2025, over 13.2 million tons of organics need to be diverted from landfills, representing over 5.7 million tons of GHG reductions, and by 2030, over 13.9 million tons of organics need to be diverted from landfills, representing over 6.0 million tons of GHG reductions
- These organics feedstock could produce about 7 million tons of new compost needing a market
- Healthy Soils Initiative is one of the Governor’s Five Pillars
- Market potential at 7 tons per acres – for 7 million tons of compost by 2025 is 1,000,000 acres potential market


Beginning in 2018, require compost use (bulk and organic) be reported by CDFA, and County Crop Reports, recognizing AB 901 regulations

- Need CDFA to determine the amount of ‘organic input material’ category – compost – for both bagged and bulk compost in tons, since it has been a registration program only reported in dollars – to determine mill tax
- Since compost is an agricultural commodity, have the County Crop Report, report compost use in acreage each year starting in 2016
- CalRecycle will be implementing the AB 901 regulations in 2018 which can assist in reporting compost use to gauge the development of the market to 2020, 2025 and 2030.

We appreciate the opportunity to provide comments on these market concepts to implement current laws and to set 2030 goals that include irrigated croplands and on state lands.

Should you have any questions, please contact me at (916) 739-1200.

Sincerely,



Neil S.R. Edgar
Executive Director